

Work Order ID 100856***100856***

Page 1

May-01-13 7:30:11 AM

Item ID: D2012-105 Accept *N900040100* Setup Start *NS1*

Revision ID: Stop *NS2*

Item Name: Arm

Start Date: 4/30/13 Start Qty: 5.00 *5*

Cust Item ID:

Required Date: 5/10/13 Req'd Qty: 5.00 *5*

Customer:

Reference:

Approvals: Process Plan: MCS Date: 13-05-03 Tooling: Date: Run Start *NR1*

QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2012-105	E								
100		0.00							
100	NC BRAKE								
Brake NC	Memo	0.00							
Brake NC	Punch to length as per Dwg D2012-105 & template D2012-105T1								
		32.15							
110		0.00							
110	Small Fab								
Small Fab	Memo	0.00							
Small Fab	1-Deburr								
			DAS						
			27						
			9-89						
120	QC5- Inspect part completeness to step on W/O	0.00	13-10-28						
120	Memo	0.00							
QC									
Quality Control									

(5) SAD 13-10-28

(5) SAD 13-10-28

5

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS						
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
			Work Order Update <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
				Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Other <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data												
Equip/Tooling												
Operator												
Material												
Setup												
Other												
Process												
Supplier												
Training												
Unapproved												
FAULT CATEGORY												
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other	

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date: ✓

OA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS								
				Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>						
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector		
Doc/Data	<input type="checkbox"/>													
Equip/Tooling	<input type="checkbox"/>													
Operator	<input type="checkbox"/>													
Material	<input type="checkbox"/>													
Setup	<input type="checkbox"/>													
Other	<input type="checkbox"/>													
Process	<input type="checkbox"/>													
Supplier	<input type="checkbox"/>													
Training	<input type="checkbox"/>													
Unapproved	<input type="checkbox"/>													
FAULT CATEGORY														
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio		<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	<input type="checkbox"/> Other

Work Order ID 100856

100856

Page 3

May-01-13 7:30:11 AM

Item ID: D2012-105

Accept

N900040100

Setup

Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Arm

Start Date: 4/30/13 Start Qty: 5.00

5

Cust Item ID:

Required Date: 5/10/13 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* QC Quality Control	QC21- Final Inspection - Work Order Release	0.00							
	Memo	0.00							

13/10/31 8/

MF

13-10-30

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS						
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled
										<input type="checkbox"/> Other	

Picklist Print

May-01-13 7:30:10 AM

Page 1

Work Order ID: 100856

Parent Item: D2012-105

Parent Item Name: Arm

Start Date: 4/30/13

Required Date: 5/10/13

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev:I02.04.03Added Inspect level 3NG

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TR0.500W.035 304 RD Tube .500 x .035W		Purchased	No			100	f	335.4143	2.6254	13.817895	540	13-10-28	

Location	Loc Oty	Loc Code
MAT017	335.41433	
120633	70.1979	
121848	29.92344	
123303	187.1315	
123449	48.16149	
m 126 922	13.8179	

NCR: Yes / No

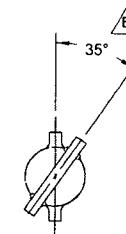
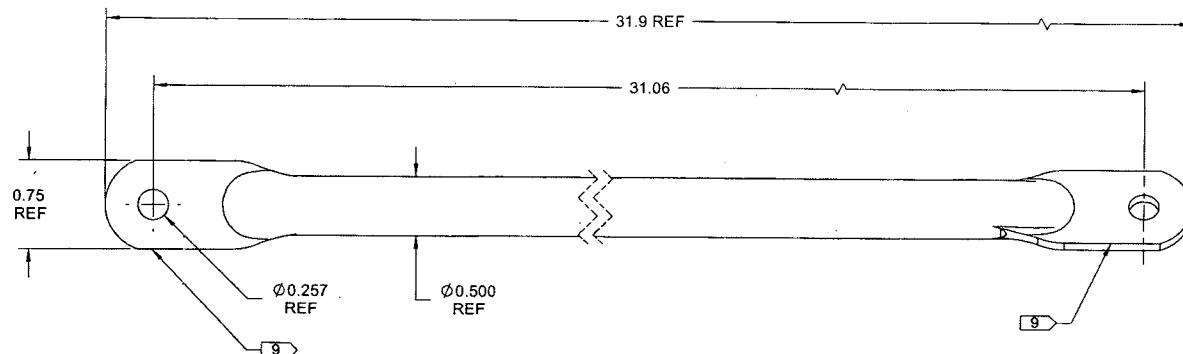
DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS														
Part No. _____	Work Order Update	Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/>	Quality <input type="checkbox"/>	Other <input type="checkbox"/>
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification		QC Inspector							
Doc/Data																			
Equip/Tooling																			
Operator																			
Material																			
Setup																			
Other																			
Process																			
Supplier																			
Training																			
Unapproved																			
FAULT CATEGORY																			
Landing Gear				General															
Bending	Bend	Grain	Ovalized								Pressure/Forced								
Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance								Temperature/Cure								
Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect								Weld								
Crushed/Crimped	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing								Wrong Stock Pulled								
Cuffs	Contamination	Maintenance	Part Moved																
Heat Treat	Countersink	Mislabeled	Positioned Wrong																
Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge																
Ripples in Bend	Drill Holes	Offset	Other																
Torque Waves in Extrusion	Drawing	Out of Calibration																	
Turning Sequence	Finish	Out of Sequence																	
Wave/Twist in Tube	Folio	Outside Dimensions																	

100856 MLS
13-05-03



RELEASED
01/01/2014

NOTES:

- 1) MATERIAL: AISI 304/316 SS TUBE Ø 0.500 X 0.035 WALL PER ASTM A213/A269 OR ASME A213 (REF DART SPEC. M304TR0500W.035)
- 2) FINISH: POWDER COAT "BLACK SANTEX" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2012-105" USING REMOVABLE TAG
- 7) WEIGHT: 0.47 lbs
- 8) MAKE PER TEMPLATE DT8116
- 9) PUNCH BOTH ENDS PER SPEC CONTROL DWG D2727

8 7 6 5 4 3 2 1

REV.	DESCRIPTION	BY	DATE
E	REFORMAT DWG. ANGLE DIMENSION POSITION AND VALUE CHG: 35° WAS 30° (ZN C2-1). PER NCR 09-060	CP	09.06.04
D	ADDED TEMPLATE & SPEC CNTRL DWG, REDRAWN IN CAD, ADD FINISH	KE	08.04.28
C	CORRECTED VIEWS PER TSR A374	KE	07.09.03
B	30° ANGLE ROTATED 60° CCW	JB	06.06.25
A	NEW ISSUE, DRAWN FROM D2012	H	02.06.04
DESIGN DRAWN CHECKED MFG. APPR. APPROVED DE APPR. DATE			
JB QP JF JF 09.06.04			
DART AEROSPACE LTD		HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D2012-105		REV. E SHEET 1 OF 1	
TITLE ARM		SCALE NTS	
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Description: *ABM*

Work Order: 100856

Inspection Drawing: D2012-105

Rev: E

Part Number: D2012-105

INSPECTION SHEET

DAS

Measured by: <i>SAD</i>	Checked By: <i>SJ</i>	QC inspector: <i>27</i> <i>9-89</i>	Engineering Approval (if necessary):
Date <i>13-10-88</i>	Date <i>13/10/88</i>	Date <i>13.10.88</i>	Date